

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of the Claims

1-12. Canceled

13. (Currently Amended) An apparatus for the decomposition of fluorine compounds ~~as claimed in claim 12,~~ comprising a reactor having a catalyst for decomposing said fluorine compounds and a catalyst for the decomposition of at least one of CO, SO₂F₂ or N₂O charged therein; a heater for heating said catalysts in said a reactor; a moisture supplying unit for adding moisture to said fluorine compounds supplied to said reactor; an oxygen supplying unit for adding oxygen or an oxygen-containing gas; and an inert gas supplying unit for adding an inert gas as a diluent gas,

wherein said reactor having said catalyst for decomposing said fluorine compounds charged upstream therein and said catalyst for the decomposition of ~~at~~ at least one of CO, SO₂F₂ or N₂O charged downstream therein.

14. (Currently Amended) An apparatus for the decomposing a fluorine compounds comprising a reactor having a catalyst for decomposing said fluorine compounds charged upstream therein and a catalyst for the decomposition of at least one of CO , SO_2F_2 or N_2O formed by said decomposition charged downstream therein; a heater for heating said catalysts in said reactor; a moisture supplying unit for adding moisture to said fluorine compound supplied to said reactor; an inert gas supplying unit for adding an inert gas as a diluent gas; and an oxygen supplying unit for adding oxygen or an oxygen-containing gas to a gas containing at least one of HF , CO , SO_2F_2 and N_2O formed by decomposition of said fluorine compounds.

15. (Currently Amended) An apparatus for the decomposing a fluorine compounds comprising an apparatus for the decomposition of and removing of SO_2F_2 from a gas containing SO_2F_2 comprising a reactor having an SO_2F_2 decomposition catalyst charged therein; and means for adding water and oxygen to said gas supplied to said reactor.

16. (Currently Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim ~~12~~13, wherein said catalyst for the decomposition of at least one of CO, SO₂F₂ or N₂O contains at least one selected from Pd, Pt, Cu, Mn, Fe, Co, Rh, Ir and Au in the form of a metal or an oxide.

17. (Currently Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim ~~12~~13, wherein said catalyst for the decomposition of ~~at~~ at least one of CO, SO₂F₂ or N₂O is selected from a catalyst of Pd and La carried on alumina, a catalyst of Pt and La carried on alumina, a catalyst of Rh and La carried on alumina, a catalyst of Au and La carried on alumina, a catalyst of Ir and La carried on alumina, a catalyst of Pd carried on alumina, a catalyst of Pt carried on alumina, a catalyst of Cu carried on alumina, a catalyst of Mn carried on alumina, a catalyst of Pd and W carried on titania and a catalyst of Co carried on alumina.

18. (Currently Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim ~~12~~13, wherein said apparatus further comprises a gas scrubbing tower removing

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hydrogen fluoride and other water soluble components from a gas discharged from said reactor by contacting said gas with water or an alkaline aqueous solution.